



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/601,826 | 06/23/2003 | Robert Tolles | 007567/CMP/CMP/RRK | 9068 |
| 41161 | 7590 | 01/03/2006 | EXAMINER | |
| DUGAN & DUGAN, PC 55 SOUTH BROADWAY TARRYTOWN, NY 10591 | | | SPISICH, MARK | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1744 | |
| DATE MAILED: 01/03/2006 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,826

Applicant(s)

TOLLES ET AL.

Examiner

Mark Spisich

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: "21" (page 6, line 5) should instead be -- 31 --.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-335279 in view of Jang et al (USP 5,729,856) and Dickey et al (USP 6,240,588). '279 discloses an apparatus for scrubbing a substrate (2) comprising a plurality of rollers (6,7) for rotationally supporting the substrate as well as an edge brush (50) for cleaning an edge of the substrate. '279 discloses the invention substantially as claimed with the exception of (1) the stationary brush and (2) the vertically oriented substrate. The patent to Jang discloses a stationary brush (20) for cleaning an edge of a substrate (100). It would have been obvious to one of ordinary skill to have modified the edge brush as taught by Jang (1) as it is an art-recognized equivalent structure and (2) it would also clean a portion of the sides of the substrate (see fig 2B). The patent to Dickey is cited for its teaching that one of ordinary skill has recognized that substrate scrubbers of the type of '279 (i.e. "wafer" cleaners) can be either horizontal or vertical

Art Unit: 1744

(see figs 2B and 2C as well as column 5, lines 34-56) and that going from one to the other would be an obvious modification.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-335279 in view of Radman et al (USP 6,550,091) and Dickey et al (USP 6,240,588). '279 and Dickey are applied in the same manner above. The patent to Radman discloses a stationary substrate (200) edge cleaning brush (402) (see figs 6A and 6B and column 6, line 48 thru column 7, line 8). It would have been obvious to one of ordinary skill to have modified the device of '279 with such an edge brush for essentially the same reason(s) set forth above. With regard to claim 2, the patent to Radman discloses a "finger" with the brush (430) at one end and a pivot (420c) between the ends thereof, at least to the extend required by the claim.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited patents are pertinent to wafer (substrate) edge cleaning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Spisich whose telephone number is (571) 272-1278. The examiner can normally be reached on M-Th (5:30-3:00), Alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Kim can be reached on (571) 272-1142. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Mark Spisich".

Mark Spisich
Primary Examiner
Art Unit 1744

MS